



DESIGN ASSISTANCE APPLICATION
for FY 2017

EL MIRAGE SPEED DISPLAY SIGNS

CITY OF EL MIRAGE, ARIZONA

**APPLICATIONS ARE DUE VIA ONLINE SUBMITTAL BY
10:00 AM ON THURSDAY, JUNE 23, 2016**

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El Mirage: El Mirage Speed Display Sign Project

PART A - CONTACT AND PROJECT DESCRIPTION

Contact Information

1. Name of Sponsoring Agency	El Mirage
2. Project Manager Name and Title	Janeen K. Gaskins, Grant Writer Assistant to the City Manager
3. Phone Number of Project Manager	623.876.2973
4. E-Mail Address of Project Manager	jgaskins@cityofelmirage.org
5. Mailing Address of Project Manager	City of El Mirage City Manager's Office 1245 NW Grand Avenue, El Mirage, Arizona 85335

Project Description

6. Please provide the Project Title.	El Mirage Speed Display Sign Project
7. Please provide the amount of funding requested:	\$20,000.00
8. Please provide a specific description of the project (i.e. bike path or sidewalk, width, length, cement or asphalt, etc.) (250 character limit):	

El Mirage is seeking \$20k to purchase 4 pole mounted speed display signs in speed sensitive locations. The equipment falls under Category 3: Bick and Pedestrian Facilities which includes provisions for improved signing, marking and way-finding.

9. Please provide the project limits:	
<p>The suggested location for the four speed display signs are within 1/4 mile of an elementary school, along the bike route and/or the Multiuse Path (paved and unpaved) areas outlined in the MAG Bike Master Plan, and public facilities like parks, library, and senior centers. The major crossroads include:</p> <ol style="list-style-type: none"> 1. North 126th Avenue and Acoma Street 2. West Varney Road and North 129th Avenue 3. West Moreno and North 119th Avenue 4. West Main Street and North Main Street 	

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PART B - PROJECT DESCRIPTION

1. What type of project is this?

<input type="checkbox"/>	Bicycle lane (4' min. w/o curb/gutter)	<input type="checkbox"/>	Grade-separated crossing
<input type="checkbox"/>	Bicycle lane (5' min. with curb/gutter)	<input type="checkbox"/>	Sidewalk (5' min.)
<input type="checkbox"/>	Buffered Bike Lane	<input type="checkbox"/>	Wide Sidewalk (8' min.)
<input type="checkbox"/>	Protected Bike Lane	<input type="checkbox"/>	Detached Sidewalk with 4' min. buffer
<input type="checkbox"/>	Shared-use path (10' min.)	<input checked="" type="checkbox"/>	Midblock Crossing
		<input checked="" type="checkbox"/>	Improved signing, marking and wayfinding

2a. Please describe the existing condition of the project site and any problem(s) being addressed.

The City of El Mirage has approximately 33,000 residents with more than 47.7% minorities and 10.9% living in poverty (MAG Interactive maps). Approximately 40% of the El Mirage's streets, including the U.S. 60 (Grand Avenue) corridor, lack sidewalks. Residents, particularly children frequently walk near the edge of roadways and/or near railroad tracks to access schools, parks and shopping. El Mirage does not have bus service; suggesting that 35% of the population is dependent on walking and biking to destinations out of necessity. Latch-key children and elderly pedestrians are less aware of vehicular movement. On June 13, 2016, a 57 year old El Mirage woman was a victim of a hit and run incident while she was walking. Earlier this year El Mirage was forced to turn off its photo radar elements due to legislative mandates. Some of the radar signs were reinstated just over a full month after the cameras went dark. Statistical data showed a 179% increase in speeding incidents (cars traveling 11 miles per hour over the state mandated speed limit of 45mph). This data supports the benefits of installing traffic calming technology like speed display signs to deter speeding and draw visibility to pedestrians and bike riders that need to travel safely. The City of El Mirage's teachers and parents have complained about the excessive speeding throughout the city as alternative routes have increased traffic. **The existing problem resulting from construction throughout the City (estimated completion in 2018) and severe weather (heat, rain, and dust) are likely culprits of future aggressive/careless driving.**

The City of El Mirage is working to address the problem by creating a pedestrian friendly community through new regional and local construction projects that will include better vehicular access, bike lanes, lighting, signage, and on-street parking. The City also used general funding to purchase four speed display signs along Cactus Road and 127th Avenue in June 2016. This past November, Dysart Elementary School PTA, Interfaith non-profit and the City of El Mirage joined forces and installed a midblock crossing speed display sign that has since discouraged jaywalking, encouraged slower speed when approaching crosswalks and provide pedestrians with a safe route to school and other commonly traveled destinations (Gentry Park, Library, Senior Center, etc.).

2b. Why is this project important to the community?

This project is particularly important to the community's vulnerable populations like elderly, students, and the working poor. El Mirage's demographic characteristics clearly show a need for more pedestrian friendly walking and biking facilities. In light of the recent construction within the west valley region (Bell/Grand Overpass, ADOT's Thunderbird / Grand Avenue Access Project and Northern Parkway) and El Mirage's local projects (El Mirage Road and Thunderbird Road) it is imperative the additional pedestrian friendly measure are used to create a community culture that slows down traffic when entering El Mirage's city limits. The proposed signs will be located within 1/4 mile of three elementary schools where parents have complained about the excessive speeding and increased traffic volumes. If funded, the project could be implemented quickly as the equipment would be mounted on existing poles. The City will use its monthly newsletter to highlight project and educated readers about pedestrian safety.

3. Connectivity: (Check all that apply)

Project fills a gap in the regional system
Explain:

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All of the proposed installation locations fall on the MAG's Bike Master Plan as bike routes and/or multi-use paths (paved and/or unpaved). MAG's Regional Transportation Plan suggests population increased that will warrant more traffic calming equipment and facilitate alternative modes of transportation.

Project connects to other local facilities

List the connected facilities:

Three elementary schools will be directly impacted by this project (Riverview, Dysart, and Surprise). Other notable locations within one mile of the proposed sites includes: Parks, Library, golf resort, YMCA, and commercial centers.

Multi Jurisdictional Project

List of Participating Jurisdictions:

Dysart Road is a shared corridor with the City of Surprise. The Varney and N. 119th Avenue sign would slow down traffic that feeds onto this major arterial street.

N/A Total length of facilities connected by this project (in miles)

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4. Describe how this project will improve access from nearby neighborhoods and/or adjacent uses:

Each of the proposed locations is within a ¼ mile of an elementary school. All of the projects are within two miles of the community park, commercial center, El Mirage Senior Center and Maricopa Library in El Mirage. **The following are specific site access improvements for nearby neighborhoods:**

1. North 126th Avenue and West Acoma: Slows down traffic during Surprise Elementary School hours; Facilitates usage of bike routes and multi-modal trail; Encourages walking/biking to school's back entry; encourages multi-use unpaved path usage for access to Gentry Park and Senior Center and, slows down alternative route traffic to Grand Avenue - Dysart Road connections during and after construction.
2. West Varney and North 129th Avenue: Slows down traffic during Dysart Elementary School and Dysart High School hours and within one mile of the Regional YMCA which promotes youth to walk and bike along bike route.
3. West Moreno and North 119th Avenue/ Reese Avenue: Slows down traffic during Riverview Elementary School hours and facilitates usage of bike routes to school and the community park.
4. North Main Street and West Main Street: Slows down traffic during Riverview Elementary School hours and facilitates usage of bike routes to school and the community park.

5. Describe how this project will improve access to transit:

The City of El Mirage does not have transit services. Elderly person 65+ and persons with disabilities use Dial-a-Ride Services to reach their destinations. MAG Regional Transportation Plan stated that El Mirage was among the top five cities with the highest growth (29%) between 2010 and 2012 (page 40). This suggests more walkers over the next ten years. MAG's Regional Transportation Plan shows intersection improvements and arterial streets improvements that will facilitate transit corridors (pages 98,107,118 and 156). More details can be found in the Northwest Valley Transit Study. **The proposed project will support the facilitation of more walker and bikers to bus stops through traffic calming conditioning that will be a direct benefit from installing the speed display signs.**

6. Describe how this project will address bike/vehicle or pedestrian/vehicle conflicts:

The proposed project provides four speed display signs along bikeways and bike routes as outlined in MAG's Bike Master Plan. The City of El Mirage's bike lanes are currently under construction. Existing bike routes and multiuse paths (unpaved and paved) will benefit from additional traffic. El Mirage is committed to providing safety elements that will encourage alternative modes of transportation for vulnerable populations and recreation. Vehicular conflict emerges when residents speed in school zones and/or are using alternative routes through neighborhoods as short cuts. The FHWA notes that speed display signs installed at the entry of school zones led to a 9-mph reduction in the average speed. Smaller reductions were found in other locations. The project addresses these issues by making drivers aware of the pedestrians and providing pedestrians with safety enhancements that will encourage them to walk/bike more (improving health and wellness).

7. What are the demographics of the area served:

[MAG Demographic Mapping](#)

People Per Square Mile

% Families in Poverty

% Age 65 Plus

Use the MAG Demographic Mapping link above. Zoom in to your project area. On the right-hand side of the screen, under "Reports," select "Custom Summary." Next, select "Corridor of Interest." Left-click to begin drawing. Draw a line through all census blocks adjacent to your project, left-clicking where needed to change the direction of the line. Double-click to finish drawing the line. The selected census blocks will become highlighted in blue. A pop-up box will appear with "Report Results for Selected Block Groups." Select the "Summary Report" tab, and use the data found there. You may export the results to Excel (click the Excel icon at the top right side of the pop-up window) for your records.

8. How will this project benefit families in poverty?

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It should be noted that MAG's Demographic Mapping Tool suggest that El Mirage's poverty percentage is only 10.9% , which is in conflict with the 2010-2014 American Community Survey 5-Year Estimates which suggest that 17.2% of all families are below the poverty level and 19.6% of all people living in El Mirage are below the poverty level. Additionally, the lack of public transit options has created a necessity for vehicles. Data from MAG's Demographic Tool suggest that 100% of El Mirage residents own vehicles with the majority owning three. The data does not provide additional consider that more than 36% of the resident (majority of children and elderly) walk to local facilities. At any rate on any given day a physical trip to El Mirage will clearly support the high rate of pedestrians walking and biking out of necessity. **Families with strollers, shopping carts and work uniforms are visible clues supporting the benefits that persons in poverty will benefit from this project.**

Furthermore, two of the locations are within one mile of the Community Action Program Satellite office, community library, courthouse, Senior Center and Community Park. One of the locations is within one mile of the Northwest Region YMCA, Community Park and future City Hall Building. In light of the recent hit and run incidents and the uptick in vehicular traffic, this project would provide added safety for El Mirage's vulnerable population of low income persons.

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9. How will this project benefit minority residents?

The City of El Mirage has a minority population of 47.7%. Approximately 28% of the residents speak a language other than English. It can be assumed that at least 40% of pedestrians are minorities and will benefit from the project. The proposed speed display signs use dynamic numerical digits posted above the speed limit requirement. Spanish speaking residents are familiar with the numerical values and are not expected to have any difficulty understanding the signs.

10. How will this project benefit elderly residents?

Approximately 21% of the residents are 65 years or more. Twenty three percent of El Mirage's grandparents are responsible for their grandchildren. This is visually apparent during school drop off and pick up times. El Mirage also has a Senior Center Facility that is within one mile of the Surprise and Riverview Schools. **This project will benefit older adults that are visually impaired and skeptical about crossing busy intersections. An ancillary benefit can also be obtained through increased health and wellness associated with physical activity.**

11. How will this project benefit school children?

This project is primarily for the benefit of school aged children, and specifically those in grades pre-k-8th grade. Dysart School District have submitted a letter of support for this project because it meets the request of parents and teachers who are concerned about the safety of students. **Three elementary schools (Riverview, Dysart and Surprise) will directly benefit from this project.** Dysart High School may also have some residual benefits. There are about 2,881 students attending these three schools. The average minority rate is 72% (state average is 59%), the average rate for free and reduced lunch participants is 80% and the average school overall rating is 3 (GreatSchool.org.).

Dysart School District's transportation policy requires students that live within one mile of the school to walk except for those with special needs. Based on the 3.8 population density within a one mile radius of the proposed school close to 50% of the students walk and/or bike to school. About 1,500 students, parents and teachers will benefit from this project.

12. Please list any schools within 1/4 mile of the project:

Riverview Elementary School: 12701 North Main Street, El Mirage, Arizona 85335
Dysart Elementary School: 12905 West Varney Road, El Mirage, Arizona 85335
Surprise Elementary School: 12907 West Greenway Road, El Mirage, Arizona 85335

13. How does the project benefit persons with disabilities?

More than 10% of the residents have disabilities and use motorized scooters throughout the city. **Persons with disabilities are will benefit from this project as the dynamic LED displays draw drivers attention to speed.** Slower speeds also allow drivers to see wheelchairs and scooters which increases awareness and the comfort level of this vulnerable population.

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14. The project is: (Check one)

- Identified in General Plan, council adopted policy, or Capital Improvements Program (provide source)
List:
- Consistent with general policy/practices, but not formally identified (provide source)
Explain:
- Not addressed by jurisdiction's plans, policies, or practices
Explain:

15. List the community partners that will be supporting the development and promotion of this project. Include city departments that will also be supporting the project.

The City of El Mirage has community support from the School PTA's and Dysart School District. Internal City support from the Police Department per school safety officer and other educational outreach programs; Community Development Department for site and installation coordination to include authorization for pole usage and technical support for locating the equipment where site visibility will be maximized; and, City Manager's office as it relates to notifications in the monthly newsletter, social media and public facilities (water bills, library, senior center, etc.).

16. Does the jurisdiction have a dedicated staff person to manage the project? Which city department will be responsible to provide information to the consultant?

El Mirage's Grant Writer, Assistant Police Chief and the Community Development Director will work together to implement the project. Consultation should not be necessary for this project.

17. Does the jurisdiction have base information available (topo survey, aerial photography, ALTA survey in electronic/digital format, easement information, utility placement information)?

This project will not require any dirt disturbance. The installation will take place on an existing pole. The project will include purchasing the equipment and having city staff install and monitor the equipment.

Part C - Attachments

Listed below are the required attachments for this project application. These attachments are intended to demonstrate the need of the project. They should clearly show the segment alignment and features that connect to other bicycle, pedestrian, and/or shared-use facilities, as well as washes, canals, railroad crossings, and other crossing features that may affect the project.

PLEASE INCLUDE EACH ATTACHMENT AS A SEPARATE .JPEG OR .PDF FILE IN YOUR ELECTRONIC SUBMITTAL.

1. Please attach a map with street names clearly showing the project area boundaries and surrounding land uses, including a north arrow.

2. Please attach up to 2 aerial photos, if available (two 4x6 photos per page).

3. Please attach up to 4 photographs with captions of the study area showing the problems/issue (two 4x6 photos per page).

4. If the applicant is not the owner(s) of the project area, a letter of support and cooperation from the property owner(s) is required. This letter shall state that the property owner(s) agree to participate in the development of preliminary plans, and to permit improvements that may be identified as a result of this program.

5. (OPTIONAL) Up to 3 letters of support for the project.

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PART D - PROJECT COSTS

1. What is the approximate cost for 15% preliminary plans* for this project? Estimate cost for each task below:

N/A	Scope of Work
N/A	Stakeholder and Core Team Meetings
N/A	Data Collection
N/A	Data Analysis
N/A	Project Assessment Report (Draft)
N/A	Project Assessment Report (Final)
N/A	Executive Summary and Regional Significance Report
\$0	TOTAL COST ESTIMATE FOR 15% PRELIMINARY PLANS (SHOULD MATCH <u>PART A, #7</u>)

*15% Preliminary Plans generally include:

- Project Information (location, description, map)
- Background data including the need for the project
- Project Scope (length, type of work, how it is to be constructed)
- Project Development
- Environmental overview
- Geotechnical and drainage requirements
- Critical outside agency involvement
- Preliminary Right-of-Way requirements
- Preliminary Utility relocation requirements
- Preliminary Traffic requirements
- Seasonal consideration
- Design Criteria
- Itemized Cost Estimate
- Schedule
- Preliminary Plans
- Preliminary Pathway Horizontal Layout
- Typical Sections
- Preliminary Aesthetic Concept
- Information on potential funding sources
- Executive Summary

2. What is the anticipated cost for the whole project (please break down costs by design, environmental, ROW, utilities, construction, etc)?

The funding request is for equipment cost of approximately \$20,000 for four pole mounted speed display signs. A one year warranty will be include for any products deficiencies. Funding will also be used for taxes and shipping. The City of El Mirage's staff will install and monitor the product as matching in-kind. This project is an eligible expense under the Pedestrian and Bicycle Design Assistance Program as identified in 3. Bicycle and Pedestrian Facilities, including: Improved signing, marking, and way-finding and 2. Bicycle and Pedestrian Access to Transit, including: Assess opportunities for crossings, including, but not limited to pedestrian refuge islands and HAWK beacons. Furthermore, FHWA's Speed Concepts Information Guide support the use speed display signs especially near schools and confirms that studies have shown a 9 mph reduction in speeds at these location (http://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa10001/).

3. Are there designated funds for construction of this project? If yes, what funding sources have been identified?

N/A

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4. If funding has NOT been identified for construction of the project, what efforts have been made to identify funds that could be used for this project?

N/A

5. Are there funds for maintenance? Who has the responsibility for maintenance?

Funding will be used to purchase a warranty for one year. This is for any product deficiencies, the City will maintain the equipment and add the future repair cost to the general fund budget.

6. Is an easement required for this project? If YES, please attach a Property Owner Letter of Support.

N/A

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PART E - SIGNATURE AND CHECKLIST

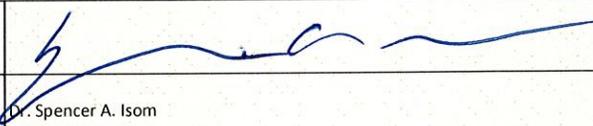
Checklist

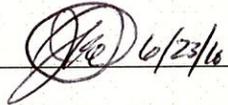
This check list is included to facilitate applicant review and verification that all required fields in the form have been completed. **Incomplete applications will not be accepted.**

	Complete?
COVER SHEET	Complete?
Cover Sheet is completely filled out	Yes
PART A - Contacts and Project Description Fields	Complete?
Contact Information, fields 1 – 5 are complete	Yes
Project Description, fields 6 - 9 are complete	Yes
PART B - Project Description	Complete?
Fields 1 - 17 are complete	Yes
PART C - Attachments	Complete?
Attachment 1 - Map with street names	Yes
Attachment 2 - Aerial photos (if available)	Yes
Attachment 3 - Photographs with captions of the study area showing the problems/issues	Yes
Attachment 4 - Letter of Support and Cooperation from Property Owner (if required)	No
Attachment 5 - Up to 3 Letters of Support (OPTIONAL)	Yes
	N/A The City of El Mirage owns the property.
PART D - Project Costs	Complete?
Fields 1-6 are complete	Yes
PART E - Signature and Checklist	Complete?
Entire checklist is completed.	Yes
Form is signed by MAG member agency's manager or administrator.	Yes
Name, title and date fields under the signature are completed.	Yes

SIGNATURE:

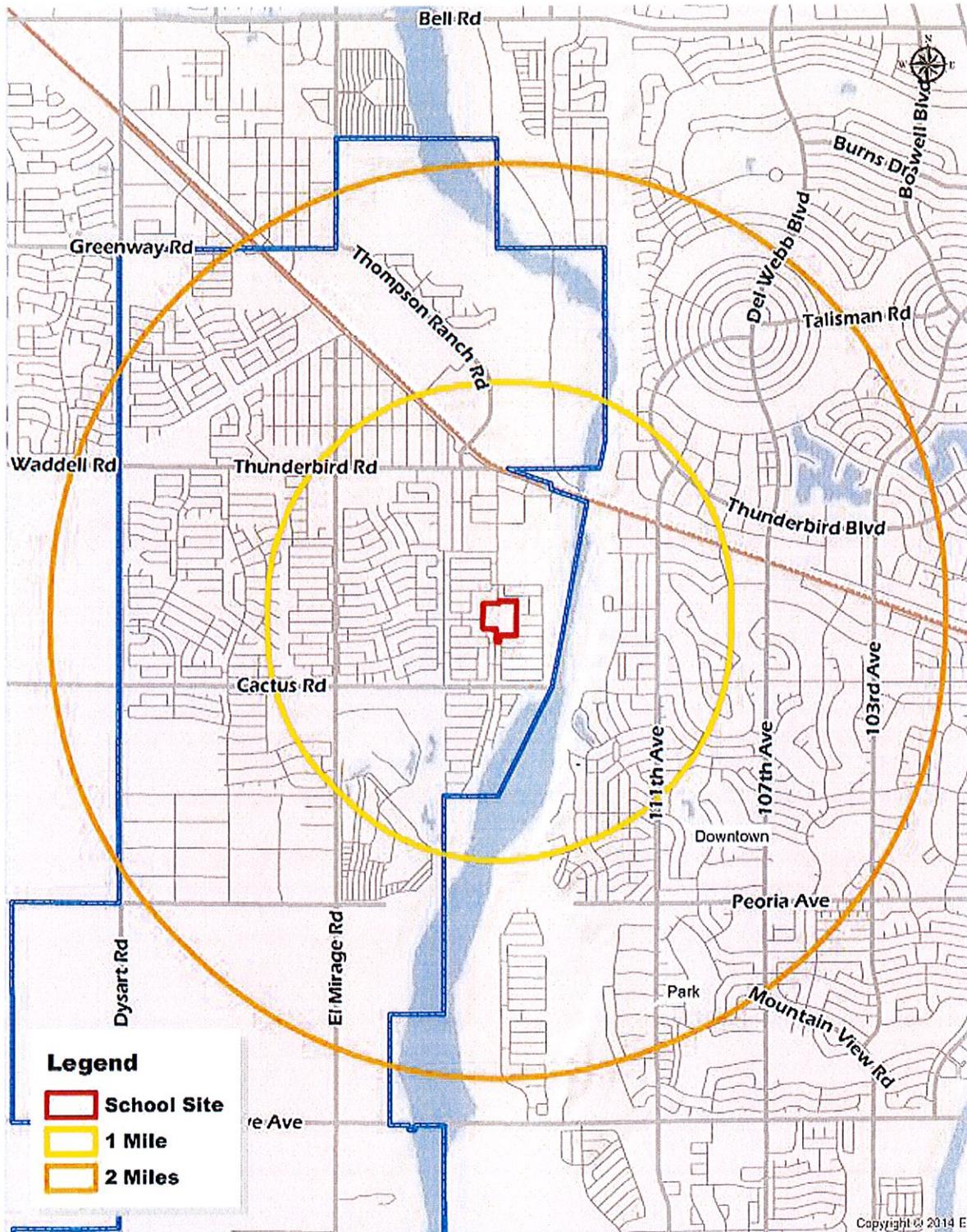
As the MAG member agency's manager or administrator, I certify that this application is accurate and complete, that local agency staff time and data will be required for this project, and that the project will be included in the sponsoring MAG member agency's local CIP/TIP if the project is selected for federal construction funding.

Signature:	
Name:	Dr. Spencer A. Isom
Title:	City Manager
Date:	23-Jun-16



ATTACHMENT 1: Riverview Elementary School

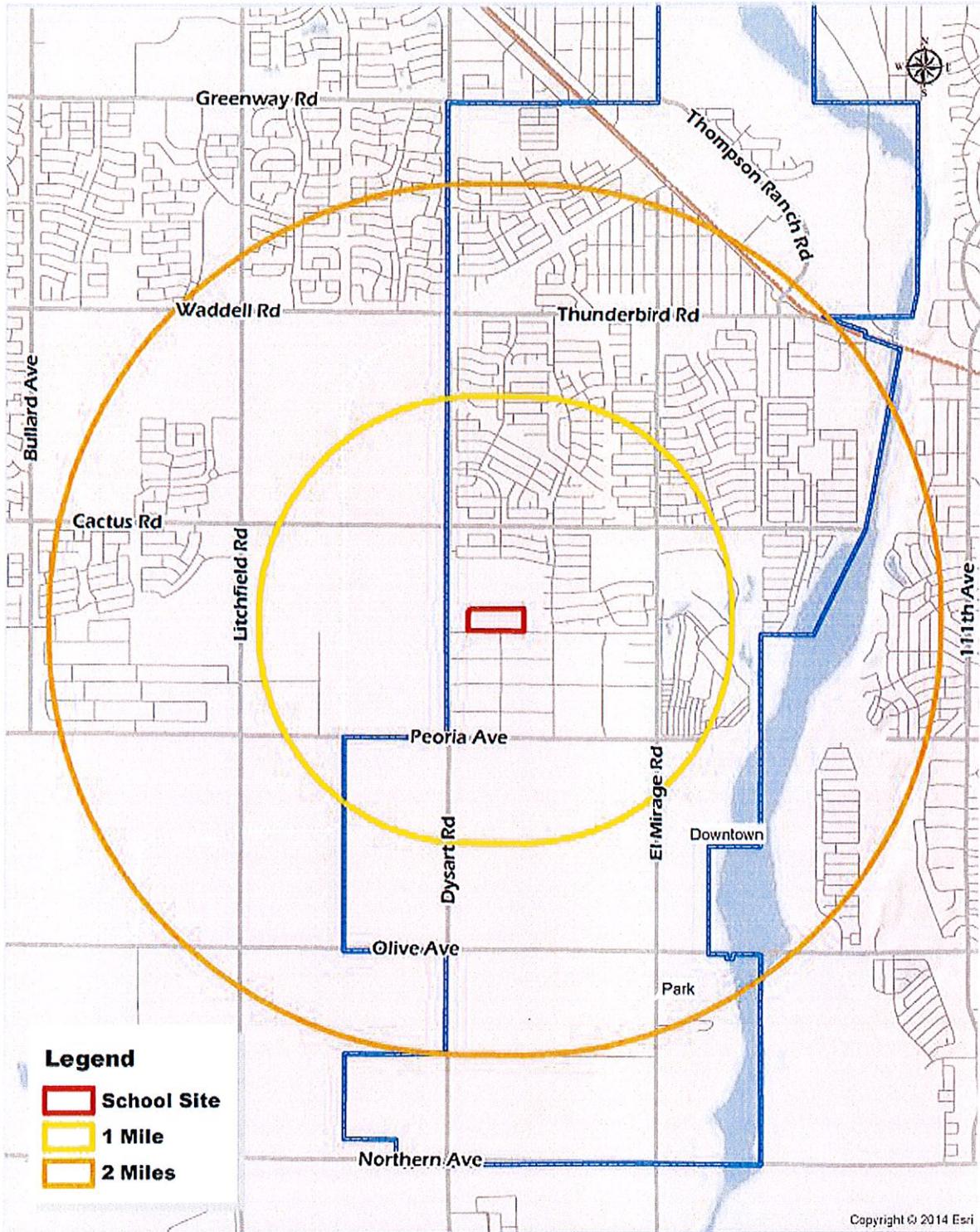
Maps with street names project boundary and surrounding land uses include a North Arrow:



Riverview Elementary School : Street Map

ATTACHMENT 1: Dysart Elementary School

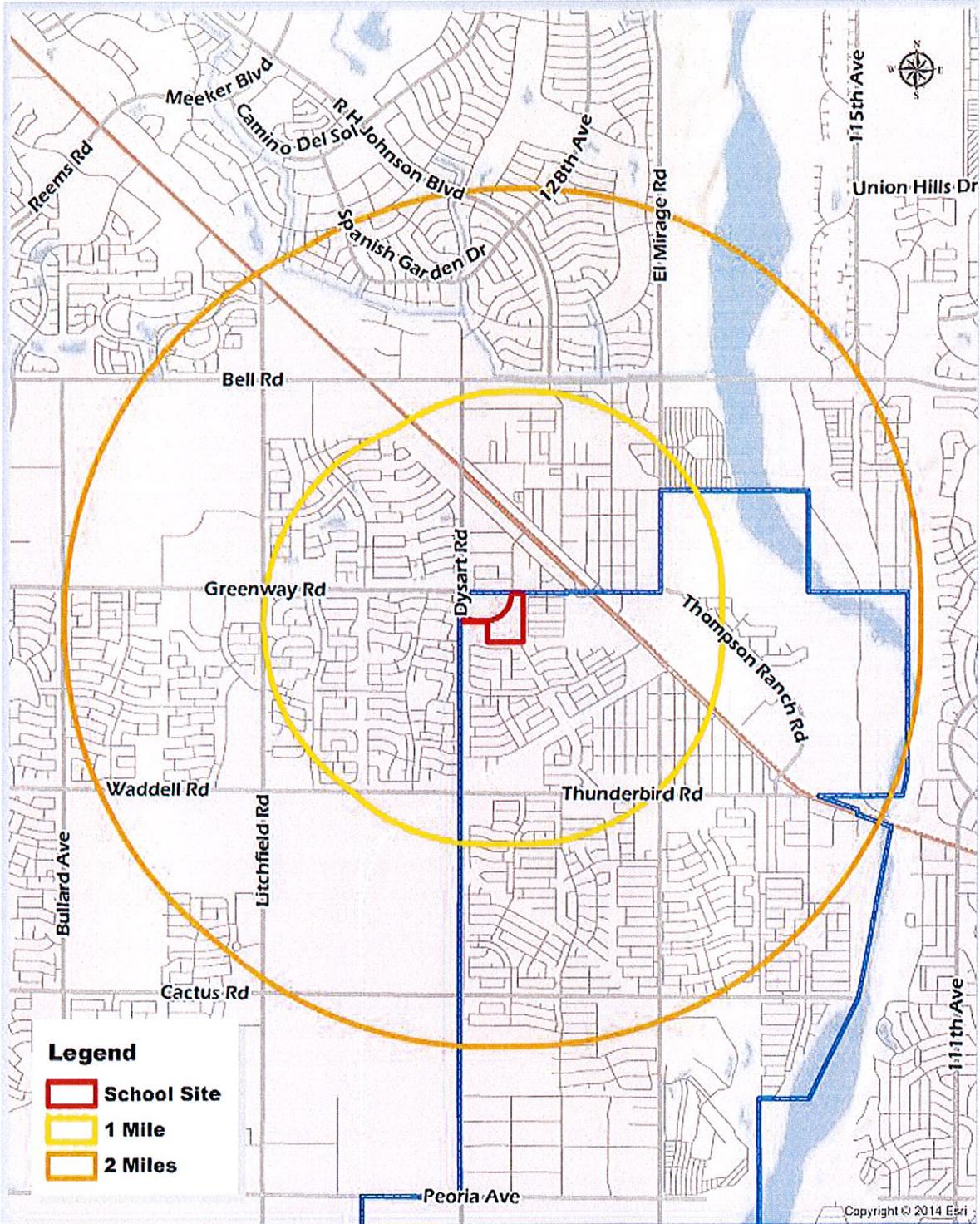
Maps with street names project boundary and surrounding land uses include a North Arrow:



Dysart Elementary School : Street Map

ATTACHMENT 1: Surprise Elementary School

Maps with street names project boundary and surrounding land uses include a North Arrow:

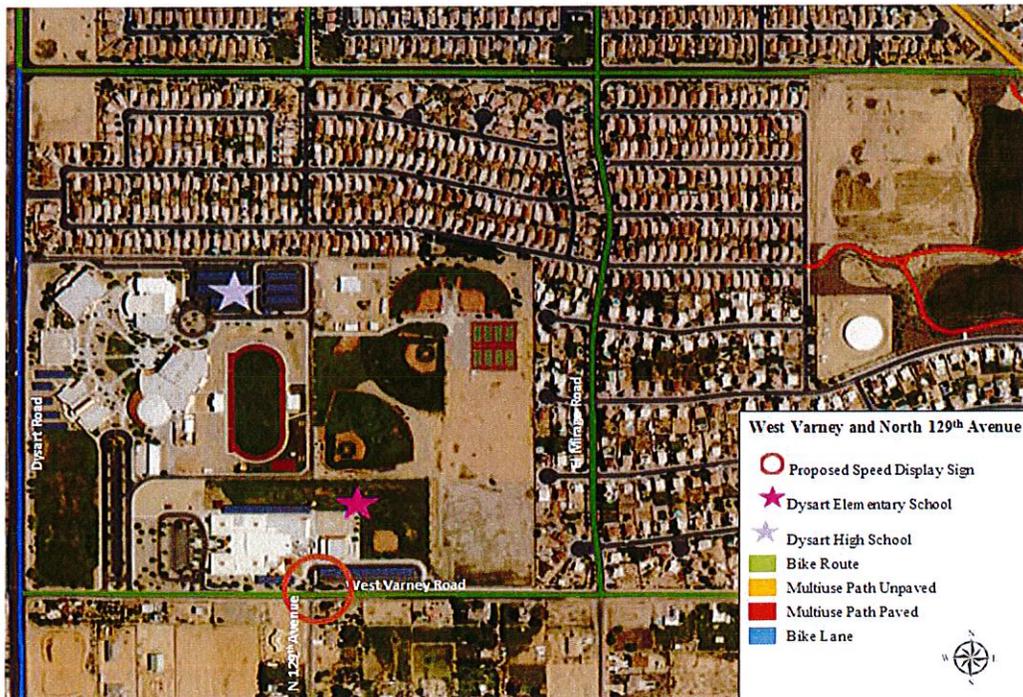


Surprise Elementary School : Street Map

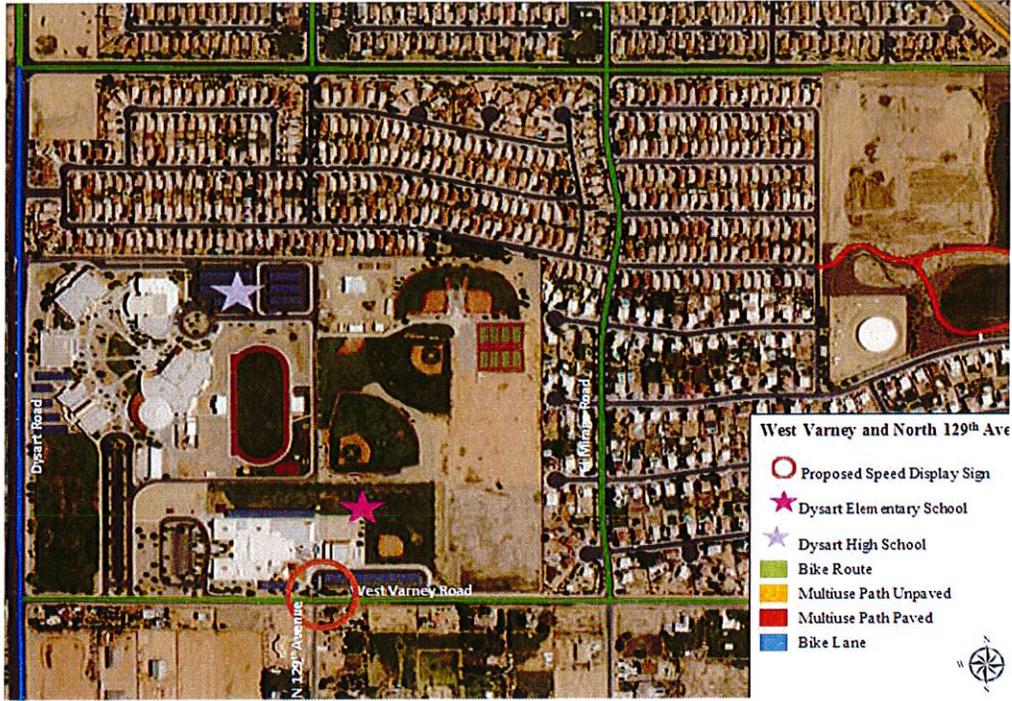
ATTACHMENT 2: Riverside Elementary School
 Please attach up to 2 aerial photos, if available (two 4x6 photos per page).



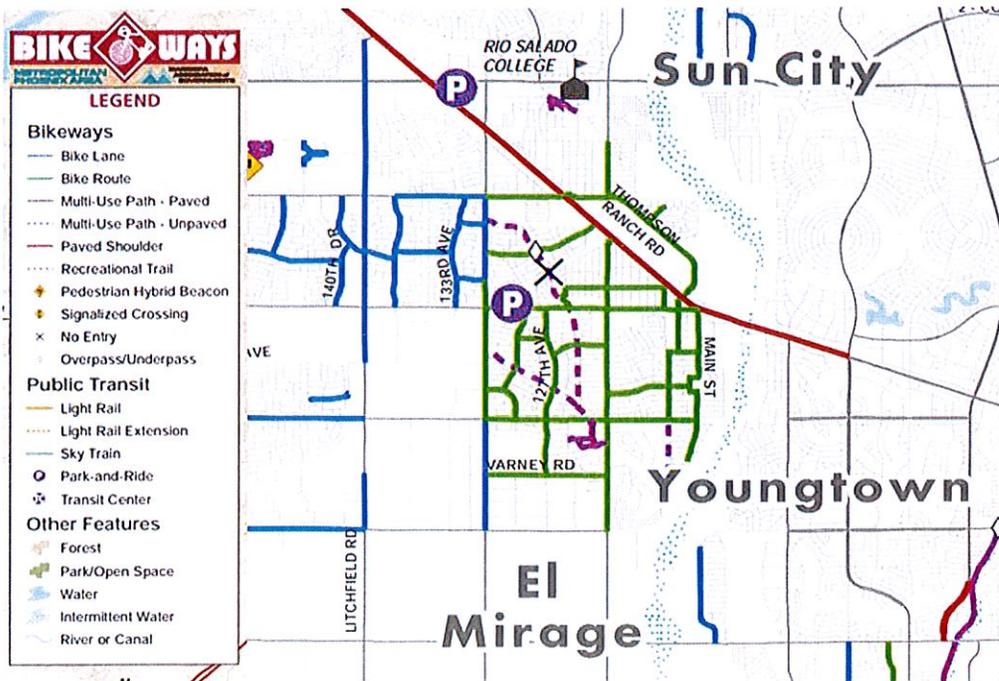
ATTACHMENT 2: Dysart Elementary School
 Please attach up to 2 aerial photos, if available (two 4x6 photos per page).



ATTACHMENT 2: Surprise Elementary School
 Please attach 2 aerial photos, if available (two 4x6 per page).



ATTACHMENT 2: MAG BIKE MASTER PLAN – El Mirage
 Please attach 2 aerial photos, if available (two 4x6 per page).



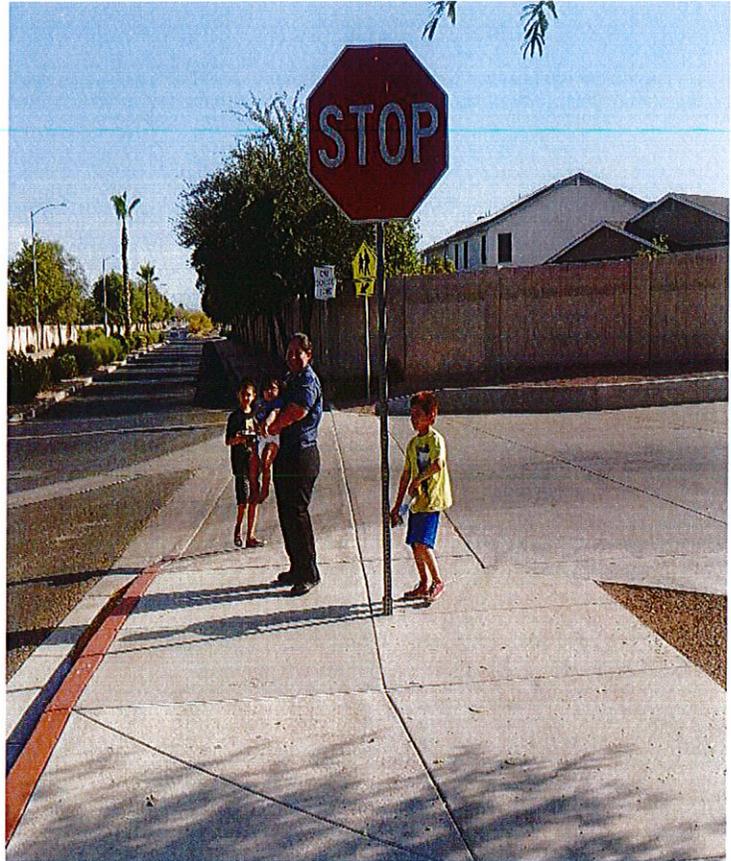
ATTACHMENT 3:

Please attach up to 4 photographs with captions of the study area showing the problems/issue (two 4x6 photos per page):

Riverview Elementary School with parent taking children to Free Summer Breakfast Program.

Parent is holding infant and unable to hold the hands of school aged children while crossing the intersection.

Riverview Elementary School looking northbound on N. Main Street where limited sidewalk may during school drop off and pick up results in pedestrian and vehicular conflicts.



ATTACHMENT 3:

Please attach up to 4 photographs with captions of the study area showing the problems/issue (two 4x6 photos per page):



Surprise Elementary School back entrance on 126th Avenue. Residents state that cars drive at high speeds.

Dysart Elementary School along 129th Avenue and Varney Street. Varney has high traffic volume and is used as an alternative route between El Mirage and Dysart Roads. Limited walking area due to unfinished sidewalks, which are contemplated in a future years.



ATTACHMENT 4:
(OPTIONAL) Up to 3 letters of support for the project



Dysart Unified School District No. 89
Nathaniel Dysart Education Center

Kathy Hill
Director of Federal Projects
and Community Outreach

15802 North Parkview Place
Surprise, Arizona 85374
Phone: 623.876.7066
Fax: 623.876.7080
Kathy.Hill@dysart.org

www.dysart.org

June 23, 2016

RE: El Mirage Safety Project– MAG Design Assistance

To Whom It May Concern:

The Dysart Unified School District (DUSD) would like to express our support for the El Mirage Safety Project grant proposal. DUSD is a proud partner of El Mirage. The city's previous community partnership with El Mirage Elementary School Parent Teacher Association and Interfaith non-profit organization resulted in a speed radar sign that has proven to be a benefit to parents and students that cross El Mirage Road.

The city is now seeking additional funding to provide the same benefit at three more schools through this grant program. The Dysart Unified School District is committed to supporting this project. Please feel free to contact me should you have any questions.

I can be reached at: 623-876-7066 or via email at: kathy.hill@dysart.org.

Thank you,

Kathy Hill M.Ed.
Director of Federal Project and Community Outreach

Superintendent
Gail Pietnick, Ed.D.

Governing Board
Spencer Bailey
Suzanne Kellis
Traci Sawyer-Sinkbeil
Bonnie Schroeder
Jennifer Tanner

Power in the preparation...Excellence in the journey...Success for a lifetime...

Original signed letter pending postal mail receipt (email proof available upon request)